

President Clarifies Position of Engineers

Sciencemen Stage 5th Annual Ball Tuesday

Will Feature Decorations, Displays at Monster Dance

AT THE BARN

McDiarmid in Charge of Decorations—Anderson Supreme Commander

In case the naive boys have been wondering at the recent popularity of the slide-rule men among the local femmes, they may be heartened by the thought that it's possibly not their features—it's their futures. For the time is here again for the Ball, which is really a round of pleasure from all angles—the Fifth Annual Engineers' Ball.

Yes, girls, this is the event for which the 'Gineers depart from their usual form and prove they have an appreciation of sentimental things like soft lights and smooth music. It's true that the program is definitely on the sweet and low side—so be in the mood.

The Science boys have been applying their science, and can assure you that there are some interesting surprises in the way of decorations. The Chemicals, Civils, Electricals and Miners, under the supervision of Bob McDiarmid, have been using their ingenuity to arrange a display of Engineering projects which will induce even the "dancingest" couple to stop and watch. What's more, President B. J. has hinted there is some intermission entertainment which will be entirely new for a Varsity function—all of which makes the whole affair seem more enticing.

The Ball is all fixed to be held at the Barn, with music by one of Western Canada's foremost orchestras. The setting is semi-formal, and the time from 8:30 to 12:30. Bus transportation is being provided for in districts where the numbers of available passengers warrant. Watch the notice boards for schedules.

So prepare yourselves for a good time, and forget your math. For one night so you won't be mixing slip sticks with lipstick. Remember, there won't be another like this for a whole year—like Christmas, you can't afford to miss it!

New Building To Relieve Congestion

The new machine shop and printing office now under construction just west of the Power House is another link in the University expansion program, and will do much to relieve the cramped conditions in the Arts Building. These conditions have become more acute during the past year due to the large Air Force and Navy schools using University classrooms and laboratories.

The new building, 95½ feet long by 31½ feet wide, will have two storeys. The ground floor will be used entirely for the Printing Department, while the upper storey will provide space for a machine shop (55 feet long), The Gateway office, a ladies' rest room and a restricted number of offices. The machine shop will be separated from the latter by a soundproof wall.

Professor I. F. Morrison, in charge of design and construction of the new building, states that the removal of the Printing Department from the basement of the Arts Building will provide the much-needed room for the extension of the Physics laboratories.

Thus it is apparent that the University of Alberta campus is being built up steadily, and when the proposed \$500,000 hospital is erected the campus will then form a block well worth the pride of every person connected with it. More power to them!

Musical Science

Tune in to CKUA Mondays, 8:15-8:30, for your program, "Varsity Varieties," featuring musical talent from the campus. Next Monday, Feb. 1st, features Gordon Clark, 'celloist, with his accompanist, Gerard Tougas. Harold Davis, master of ceremonies. This is the second broadcast in this series which, from the number of programs already arranged, is proving to be a popular one. All Varsity musical talent should be presented on this feature, so contact Roberta Kiefer for programming.

DEAN



Message

28th January, 1943.

Once again the busy Engineers assume the role of Journalists for an issue of The Gateway.

In a few weeks they will be in training for the many and varied occupations of the armed and industrial services connected with the war.

New regulations are in the making which should clarify the position of these and other science students with respect to what is required of them during the summer vacation and after graduation.

There is every indication that they will be placed where they are needed most.

R. S. L. WILSON.

Science Smoker Starts Season

Ceiling unlimited, power unlimited, and speed unlimited. This was the substance of a speech by Mr. F. Ades, Assistant Chief Engineer, T.C.A., Winnipeg, given at a meeting held jointly by the Aeronautics Club and the E.S.S. on Jan. 11th.

Mr. Ades pointed out that design of the aeroplane was ahead of the power unit, and in turn the power unit was ahead of the propelling force in efficiency; therefore a search for the latter was prerequisite in aeronautical engineering today.

A search for previously unknown heights to which a skyliner has yet attained is a step which also has to be taken, it was asserted.

In his main topic, Mr. Ades brought to light a satirical episode of the design and construction of an aeroplane. This article is to be found elsewhere in this edition.

During Mr. Ades' main speech, he pointed out the unlimited possibilities of aeronautical engineering

Preparing Digest Of Opinion Poll; No Conference

Two things remain to be said about the now familiar questionnaire: who prepared it and what is going to be done about it? Sensing the interest and confusion as to student status, the Student Christian Movement took the responsibility of asking each of the faculty clubs to name a representative to a planning committee to see what could be done about it. That committee is completely responsible for all that has been done in this regard, though Dr. Newton and many of the faculty have given their approval and many suggestions.

The conference planned has proven impossible because no hour could be found in which all who were interested could attend. The committee, however, suggests the following alternative. On the basis of the information provided by the questionnaire, a full statement will be drawn up to include an outline of the present official status of students drawn from the relevant Orders-in-Council, the interests of the students as reflected in the questionnaire, and a definite resolution or resolutions to the appropriate authorities. This statement will then be posted on the bulletin boards on Monday, Feb. 1, and a ballot taken of the entire student body on the following Thursday unless otherwise announced. The results will then be turned over to the Students' Council for their official sanction and action.

A digest of the answers to the questionnaire will also be on the bulletin boards for your information and interest. It will be noted that the action proposed deals only with the first part of the questionnaire dealing with the status of students. The intention is that with sufficient back the second and no less important part will be given further attention as soon as possible.

in Canada; for Canada is situated at the hub of future world air transportation.

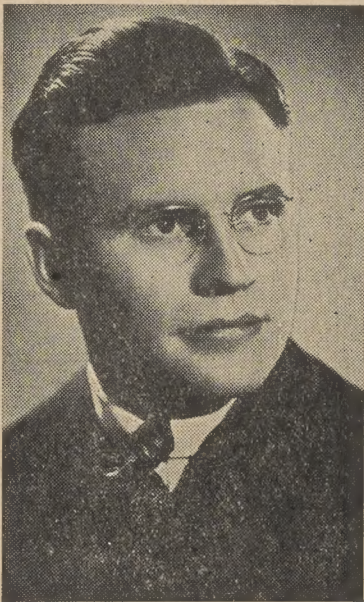
At the conclusion of Mr. Ades' speech, three talking pictures were shown: Building a Bomber, Wings Across Canada-T.C.A., and Drilling for Oil (in technicolor).

The meeting was conducted by Anatol Roshko, acting president of the Aeronautics Club.

Mr. D'Arcy McLeod, Edmonton Traffic Manager, T.C.A., introduced Mr. Ades. During the course of the introduction it was discovered that Mr. Ades attended U. of A. in 1932, after which he went to University of Michigan, Ann Arbor.

Cokes and doughnuts were served, of course. Needless to say, M142 was packed.

PRESIDENT



Message

This issue of the Engineers' Gateway marks the second annual production of its kind on the campus, and I sincerely hope that our efforts this year will justify a continuance of the practice of having campus clubs edit The Gateway.

While it is not our intention in writing this issue to contribute a great many items of lasting cultural value, we do recognize the advantage of being able to maintain an optimistic and cheerful attitude during these difficult times. This, I believe, constitutes sufficient reason (and apology, if it is deemed necessary by some) for the Side Rule Faculty to venture forth into the fields heretofore held as sacred unto themselves by those students who attain to a Bachelor of Arts degree.

This year marks a new mile-post in the history of our E.S.S. Never before in the history of the University have there been so many students in the Faculty of Applied Science, and as a result never before has the E.S.S. enjoyed such a large membership. I wish to thank all of the members for their excellent co-operation throughout the year in helping the society obtain the degree of success that it has. Special thanks are due to those students who have worked with me as the executive as well as Harry Hole, our enthusiastic Gateway Rep., Lucien Lambert, who is guiding our athletic endeavors, and Bob McDiarmid, who has assumed the task of supervising decorations for our coming ball. Also a special word of thanks is due to our Honorary President, Dr. J. O. Walker, who is always "right in there" when it comes to ideas and support.

B. J. ANDERSON.

Technical Personnel Head Expected Here Feb. 1, 2; Will Meet E.S.S. Officials

War-time Regulations Outlined

SCIENCE STUDENTS TO DECLARE INTENTIONS

Discuss Summer Employment

In a statement issued to the Engineers' Gateway, Dr. Robert Newton, President of the University, declared that Mr. H. W. Lea, Director of the Bureau of Technical Personnel, and Col. G. W. Beecroft, Military Adviser, will visit the University of Alberta next week to discuss the present status of Applied Science students. In the course of their visit they will interview the University Service Training Board, heads of scientific departments, and heads of students' technical and scientific societies.

"Shortly after the outbreak of the present world conflict," stated Dr. Newton, "the National Research Council, through its president, Lt.-Gen. A. G. L. McNaughton, circulated Canadian universities to the effect that it seemed likely to be a long war, that it was important to maintain an adequate supply of technical personnel, and that students who were making satisfactory progress in their studies should therefore be encouraged to continue to graduation.

"How well taken was this position has been amply shown by the course of events. In May, 1942, after a little short of three years of war, representatives of Dominion Government departments brought to the attention of a Universities' Conference prospective needs for technical personnel that year totalling about two and a half times the normal number of University graduates in the fields represented.

"In an attempt to fill the hiatus in particular types of personnel, the Air Force invoked the help of the universities in organizing special courses for radio technicians, and the Navy last year arranged to use the University of Alberta as a training centre for engine-room artificers and radio technicians. The Army arranged with the University of Toronto for what amounts to an intensified first-year course in engineering for enlisted men, which is being conducted during the current year, and is now negotiating with other universities, including Alberta, for similar courses to begin next fall. The Army has also helped the Universities to accelerate Medical and Dental courses, by giving senior students an opportunity to enlist and draw army pay while completing their studies.

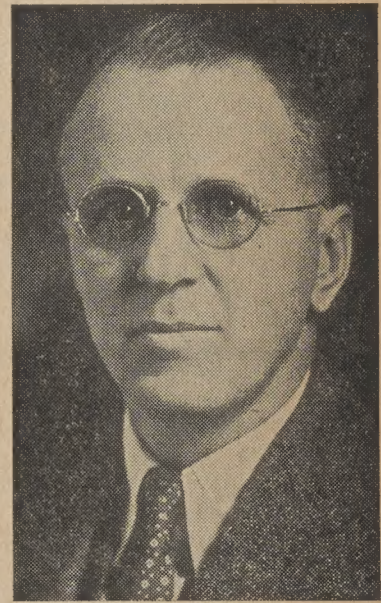
"For all other types of technical personnel, whether for the armed services or for civilian needs, the War-time Bureau of Technical Personnel is responsible. During the current year the Dominion Department of Labour (to which the Bureau belongs) co-operated with provincial governments in offering financial aid to needy students, in the hope of increasing the number of those in training. A special appeal was made to matriculants with high standing in mathematics and physical sciences, on the ground that even one or two years' of university training would qualify them for much more effective war service.

Maintain Arts Courses

"The position of students in the liberal arts is the one most often questioned. Both the Dominion Government and the Universities' Conference have affirmed repeatedly that the Arts Faculty must be maintained. It is the heart of the University. Its departments give instruction in every professional faculty. Moreover, even in wartime we cannot afford to discontinue entirely the education of specialists in the liberal arts. Such a hiatus might easily prove disastrous in the post-war period. At its latest meeting (January 9), the National Conference of Canadian Universities complimented the Government upon its enlightened policy towards higher education in wartime, and promised that, in accordance with the expressed desire of the Director of National Selective Service, the universities will ruthlessly weed out incompetent students and continue to require military training of all students.

"All this is very logical and sound from the point of view of those responsible for maintaining an adequate supply of trained personnel. Unfortunately, it does not relieve the individual student from embarrassment and perplexity when ill-informed, shortsighted people ask him, 'Why aren't you in uniform?' Actually only a minority of students are free any longer to enlist when they want to. All those classified as in training to become technical personnel may enlist only with per-

(Continued on Page 6)



Prof. Morrison of the Civil Engineering Department, under whose direction the Photoelastic Polariscope lab. has been constructed.

Polariscope Lab. Constructed Here

During the summer and the first half of the current academic session a photoelastic polariscope has been constructed and set up in the department of Civil Engineering. This instrument makes use of the phenomena of multiple refraction which comes about when a strain is applied to a model of transparent material. The light which passes through the model, if plane polarized, produces a pattern of colored interference fringes. In order to do good scientific work, however, monochromatic light must be used, in which case the fringes are all black.

The polariscope consists of a light-box with suitable color filters which allow only the light from the green line in the mercury spectrum to pass. The light is produced by a mercury lamp and is diffused by means of a ground glass screen. This produces a fairly uniform field. The light then passes through a 12-inch polaroid disc, two quarter wave plates and finally through a second polaroid. The model is placed in a straining frame situated between the quarter-wave plates. A suitable lens, not yet secured, will throw the image on a ground glass screen or on to a photographic plate.

This whole equipment is mounted on a table in a newly built dark room. It has been difficult to secure the various pieces to build up the equipment, even after considerable time spent in careful planning. Even yet no suitable materials from which the models are to be made has been secured, and none is at present in sight. The money for the equipment came from the Carnegie Research Fund.

It is hoped by the use of this equipment to solve many problems in the design of foundations which have heretofore been too difficult for mathematical analysis. It is also likely that many other pieces of investigation will be started as soon as suitable materials can be secured.

ATTENTION, FLU VACCINE TEST VOLUNTEERS!

All those students whose names start A-J inclusive will present themselves for vaccination at the Infirmary on Saturday, Jan. 30, in alphabetical order, starting at 2 p.m. That is, the A's will present themselves at 2, the B's at 2:30, etc. Those whose names start K-J will present themselves on Monday, Feb. 1, not necessarily in alphabetical order, but as is convenient in consideration of labs., etc.

LOST

One only 6-inch Slide Rule. Finder please return to R. B. McDiarmid in the 3rd year Electrical Lab.

(Continued on Page 2)

Flu Vaccine Volunteers From A-J! Get Your Shot Saturday, 2 p.m.

THE GATEWAY



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Phone 31155

EDITOR-IN-CHIEF FRANK MESTON
BUSINESS MANAGER BILL PAYNE

CHIEF CENSOR B. J. ANDERSON

We are, we are, we are the Engineers.

We can, we can, we can drink forty beers!

Drink rum, Drink rum, Drink rum and come with us!

We don't give a damn for any damn man,

Who don't give a damn for us!

GUEST EDITORIAL

THE status of the University student has been the subject of much discussion since the war began, and especially during the past six months. We believe, however, that this has been confined mainly to those connected with the universities themselves and certain departments of the government. Criticism, favorable or otherwise, has not

STUDENTS... been very apparent from the general public or the press. Students who have worked with others who do not attend university realize this, but because of the articles written in our student papers take it for granted that unfavorable criticism does indeed exist and in large quantities.

Intelligent people realize that the need for higher education is as great or greater now than it ever was. If there had been more of it in the past the world may not be in the condition it is today. A little thought, too, will reveal that this education cannot be confined to those who are medically unfit for military service, as that is not necessarily a sign of the intelligence required to successfully pursue a course at a university.

Publicity of the many useful services that have been performed by both graduates and undergraduates toward the war effort has, in many cases, been pretty scanty. The training received at university has enabled students to do seasonal work of a very essential nature that could not be done by a person without this training. It would be indeed much better if some of these things were brought to the public eye by the press, rather than the isolated case of someone swallowing a goldfish.

The government has brought out regulations that make it possible for us to continue our studies, but in most cases there have been conditions attached to them that have made our lot more difficult. The most important of these are (1) military training, the value of which is doubtful after the first term, and (2) stricter regulations regarding the academic records. The standards of most of Canada's universities have always been high, high enough in fact that it required something more than mere attendance to remain a student. Attempts to raise these standards will eliminate many students who would normally graduate and become more useful citizens than they otherwise might be, whether in the armed services or not.

If we do not come up to these new standards, we will be punished, at least that is the way in which it has been presented to us. And how are we to be punished? The punishment is that we will be drafted into the army, and only the army, not the navy or the air force, if that is where we would like to fight. It is strange that it should be regarded as a punishment to be in your country's army. This sort of thing may have something to do with the difficulties in recruiting men for the army. If a student feels that he would be more useful to his country in the army, and he joins one of the services, he then regards it as a privilege, as he does if he stays in university if that is where he belongs.

All these matters concerning the student have been settled by others than students. The majority of the students are adults with adult minds, and a much more satisfactory situation would likely exist if representative students were present on boards and committees dealing with student affairs. We are quite capable of assuming some responsibility.

At the present time they tell us that we may not approach any person on the subject of employment, even summer employment, and what is more, no person may approach us with a view to hiring us. That is all. What comes next?

THE Universities of Canada have done a splendid job in co-operation with the Canadian Government in the war effort, but there has been a feeling that the Government has not reciprocated to the same extent. The place of the student in these critical times has not been brought out as clearly as it should

OTTAWA AND THE UNIVERSITY not only from his standpoint but also from the standpoint of the public at large.

Members of the Government have more than once conferred with representatives of the universities and have placed before them the immediate and future requirements of men trained in engineering and pure science. They presented results and surveys which indicated that the armed services



There will be no Casserole this issue—instead there will be a few jokes.

Here's a story about the northland. The natives around Ft. St. John and Dawson Creek tell the uninitiated army boys working on the Alaska Highway to be sure to get a picture of the "Key Bird" when they get to Alaska. It seems this bird is the one that sits on the North Pole and says, "Key-ryst, but it's cold up here."

A big Indian had just ordered a ham sandwich at a drug store counter and was peering between the slices of toast, when he turned and said to the clerk, "Ugh, you slice 'em ham?"

"Yes, I sliced the ham," the clerk replied. "Ugh," grunted the Indian, "you damn near miss 'em."

New song dedicated to Jap sailors, "He Wears a Pair of Water Wings."

Father—What was the most difficult thing you learnt to do while you were at Varsity?
Frosh—Oh, I had a pretty tough time learning how to open beer bottles with a quarter.

A Negro preacher began his sermon by saying, "Brethren and sisters, here you is comin' to pray for rain. I'd like to ask you just one question, where is yo' umbrellas?"

George Bernard Shaw says marriage is popular because it combines the maximum of temptation with the maximum of opportunity.

Then there is the story about the small boy trying to get a tire off the car and the 15)*! thing just wouldn't come off. He was swearing loudly when a priest happened along and told him he shouldn't swear—maybe if he prayed it would come off. So Johnny said a prayer for a minute or two, and the tire fell to the ground.

"Well, damn me all the way to hell!" exclaimed the priest.

Thor, God of Thunder, used to hurl a thunderbolt across the world every morning when he got out of bed, and shout for all to hear, "I am Thor, I am Thor!"

Then he married. The day after his marriage he got up and shouted as usual, "I am Thor, I am Thor." His wife replied, "You're thore, thay . . ."

Stupor: Being unable to respond to external influence, like when a fellow takes a girl in the Tunnel of Love to show her how his Mickey Mouse watch shines in the dark.

Engineer (staggering to bar)—Gimme a horse's neck.

Friend (same condition, only worse)—Gimme a horse's tail; no sense killing two horses.

and the essential industries need many times the number of these personnel that the universities are now training. They also have stated that, in general, students will be of more value to the war effort if they continue to finish their courses and graduate.

Unfortunately, the authorities at Ottawa have failed to make any clear-cut statement regarding these facts to those that they effect primarily, the students. With everything so indefinite, with the Government failing to state its policy publicly, it is not surprising that the student body is in a ferment wondering whether to stay in college or chuck the whole thing and do what is easiest—enlist in one of the branches of the armed forces.

Such a situation could be rectified to a considerable extent if the Government explained that universities are essential toward victory and are required to train men in special technical lines. The Government has spent much money in publicizing the great need for munitions workers, welders, food producers, lumber men, coal miners and shipbuilders, but they have not sold the idea of university trainees to the public through releases to the newspapers and the radio. Such a procedure would more truly fit the facts than the adverse publicity on the ejected ten per cent carried recently by the wires of the press associations.

Orders-in-Council related to the control of university students have not been published widely, nor has any attempt been made to interpret the obscurely worded and, sometimes, apparently contradictory regulations contained therein. This is especially true of Order-in-Council PC9566, which applies to science students. These regulations imply that science students, if their records are satisfactory, are to continue in college to graduation and will then go to the armed services for training as technical officers or be assigned to such technical work as the Minister of Labour may require. The regulations also state that no one can negotiate with or employ any student without the permission of the Minister of Labour.

This Order-in-Council gives the science students no lead in how they may seek summer employment. It is hoped that the visit to the University, in the near future, of an officer of the War Time Bureau of Technical Personnel will do much in clearing up these and other questions of vital interest to the student body.

THE GATEWAY

Watch on the Rhine

(Continued from Page 1)

There is little to say of Doris Williams as Babette. She made a very acceptable child, with a good deal of the winsomeness and delicacy expected in the part. Indeed, her childish confusion and embarrassment at times, could hardly be improved upon.

Of the women, only Isobel MacGregor remains for comment. When I saw her Friday night, I thought she was so good that she was good, but my own better half took me to task for saying so. When I went back Saturday night, I thought she was so good that she was good. I still hover between these opinions. There is no doubt, in either case, that her performance was excellent and fitted the part perfectly; but the question in my mind is whether by some stroke of luck or genius the Director found an actress naturally fitted to the part, or whether the part was actually created. I should dearly like to see Miss MacGregor in another role and satisfy my curiosity on this point. At any rate, surely nobody could better present the shabby, hunted, half-starved wife of an anti-Fascist. In her stage get-up and in her furtive, erratic gestures and movements, she vividly revealed the tragedy, the nervous harassment and strain suffered by those women whose husbands fight for decency in the world. There were no smooth speeches, no smooth gestures nor sweeping ones, and the years behind her were almost visible. She was never out of character for a moment, whether she needed to speak or not, and some of her gestures, revealing her past pain over her husband's hands, were harrowing. She lived the part; and if there were any dry eyes in the audience, either Friday or Saturday, when she urged her husband to return to Germany at the end of Act II or when he left at the end of Act III, they were not mine.

Miss MacGregor deserves one special tribute. For some reason that cannot be explained, a kiss or an embrace is always funny to the University audience. No doubt these things are sometimes awkward. But the acting of Miss MacGregor and Mr. Carr was so sincere and so honest that on Saturday night, at any rate, their leave-taking was performed before a house profoundly silent. I do not remember any other actors who have compelled this tribute.

In this part, then, and in that of Mr. Carr, as Kurt Müller, there is no cheapness and no hoakum. It is here that the author has something to say and gets it said. We were fortunate to have Miss MacGregor and Mr. Carr in these roles.

Of the male actors, Johnny Kuzyk was the youngest and in some respects the most appealing because of the naive childishness, the odd pre-maturity of his part. It was noticeable that no other actor was out, or at fault, when playing opposite this lad, a fact which speaks volumes for his quality and his team-play.

Bob English as Joshua, his older

brother, a gawky lad of furious convictions, did very well with a part by no means easy and with long periods of silence.

Bob Willis was equally acceptable as Joseph, the Negro butler, but the costume and part seemed a little overdone. It is the author, not the actor, who is to blame.

Jim Spillios was called upon to take the part of David only ten days before the play opened. It speaks well for his experience and talent that he was able to master the part at all. Under these circumstances, it will be no injury to Mr. Spillios to point out that he seemed rather stiff physically and unexpressive vocally. His playing lacked those shades and nuances of meaning and expression so well shown by Mr. Shochor and Mr. Carr, but it is hard to see how he could have done much better as such short notice. He was certainly better than could have been expected.

The astonishing thing about Mr. Shochor was that he was able to take the suave and unrealistic villain, so dear to the stage and so unknown elsewhere, and make him completely real. Even the University audience accepted it, and surely there is no audience less willing to give the actors a "break." Mr. Shochor perhaps, to a refined taste, allowed his gestures and tones and expressions to run away with him a little; some of my friends have said so; but I returned Saturday night intending to satisfy my mind on this point and found no flaw in his work. He has a beautiful voice, capable of great range of expression—indeed, it ought to be remembered that this voice, as well as Mr. Carr's, created a contrast that was disadvantageous to the flat tones of Mr. Spillios who would otherwise have seemed much better. I found myself, as a person required to do a great deal of reading, time after time envying Mr. Shochor the quality of his voice, its carrying power, its splendid range of tone; and I am sure it was far more this instrument than his stage presence or his gestures that carried the part. Indeed, his posing and his theatricalness, however, well suited to the character, would have seemed absurd had he not mesmerized the audience with his voice.

At the end of the Performance on Saturday, Mr. Shochor remarked that he would like to play Richard in "Richard III." The suggestion is one the Dramatic Society might well remember. If he were available for the lead, capable as he is of the "silen, sly, insinuating" villain, the play might be well done indeed.

Mr. Carr's acting was definitely the best in the play. It must be acknowledged, of course, that he had something to play; the author was kind to him. His complete submergence in the part may be indicated by the fact that I had supposed his voice to be high and thin. It was high and thin in "Candida," but in "Watch on the Rhine" it was consistently in the middle range; and I would not now be surprised to hear him next year in basso profundo. What his normal or natural voice may be, I have no idea.

This lad is an actor. One might have doubted that he could do better

UNCLE JOE'S CORNER—

THE MUSKEG SPECIAL

Dear Kiddies:

Today Uncle Joe is going to take you for a train ride through the great north country to the mecca of all Alaska Highway workers, Dawson Creek.

We start our trip at the Canadian National Depot in Edmonton, where we board the Northern Alberta's crack express, "The Muskeg Special." We are supposed to leave at 5:15, but at 5:45 they are still loading express. At 6:00 we are ready to go, but Redface the Indian decides he needs another 40 to replace the one drunk since 5:00. He speaks to the conductor, who is most understanding, for he not only holds the train, but also goes along to get a crock for himself. Of course, they have to hoist the odd one on the way, so it is well on to 7:00 before we leave and go streaming down the track.

Leaving Edmonton, we head north roaring through the picturesque countryside. Just before dipping into the Sturgeon Valley we catch a glimpse of St. Albert with its myriad memories. Climbing out of the valley, we rocket through Caribou, where the track forks, one branch to Waterways and one to Dawson Creek.

Now the hogger really puts the fog to her, and by sheer good luck we negotiate all the curves to Westlock, where we pull up with screaming brakes in a cloud of steam and smoke at 9:45, just in time to make the pub. (Those were the good old days when the taverns closed at 10.) With the engineman in the van, we all stagger to the bar to take on a load.

Beyond Westlock we knife through the satin night past the odd hamlet and plunge into the weird reaches of the muskegs, where twisted trees pluck with spectral arms at the coaches. But the voyagers are oblivious of nature (except perhaps the beautiful girl opposite), and the party rages gorgeously.

Now, kiddies, give Uncle Joe your hands, and we will go through the coaches. Those men under the smoke are playing poker. Just listen to those lusty men singing their lustful songs. Step over that dead soldier (empty bottle to your little sisters). That, Johnny, is a bird. That engineman, like the train, is negotiating some curves.

Soon the newsy will make his rounds and do a roarmg trade in coffee and tomato juice. Even now some of the revellers are calling for red-eyes as the train slides down the Athabasca valley. Just before crossing the Athabasca at Smith, the engine takes on coal and water,

and we can step outside and clear some of the cobwebs.

From Smith to McLennan we enjoy (or do we?) fitful dozes, and witness the renowned "Parade of the Pink Pachyderms" done in brilliant technicolour.

At McLennan we all rush madly to the hotel or cafe for breakfast of black coffee and toma juice, while three engines pounce on our train and tear it coach from coach. Don't worry, kiddies, they are merely switching, a process of bumping and banging coaches all over the yard and hooking them together again in a different order. The chaotic turmoil lasts for an hour and from it emerges two trains, one for Peace River and one for Dawson Creek.

West again, and before long we are twisting down the Smoky River valley to Watino, where another engine meets us and pushes us up the other side.

Soon we arrive at Rycroft. Now, kiddies, you have a choice between a round trip to Spirit River or an hour's session in the tavern with Uncle Joe.

Southward from Rycroft to Grande Prairie, spending the time drinking beer and shooting craps with the porter. Last night he tried to take the Doc's boots to shine them while the Doc was in them. Right now he is taking the Doc's shirt as well as the boots.

Heard from beneath a pile of coats, "From one Babe to another, sister, can you spare a kiss?"

At Clairmont we met the east-bound express, and during the ensuing struggle as to which train takes which cars which way, we stock up at the pub.

From Clairmont it should be smooth sailing to Dawson Creek, but at Dimsdale the conductor sees some ducks and stops the train to get some for his dinner, meanwhile the engineman goes fishing in a nearby creek. Today both were lucky, and in a few hours we are again rolling with stops at Wembley and Hythe for beer.

At Pouce Coupe we wait while someone haggles with the local caddy to drive him to the Vendor (distance, 1 mile) and return. The last mad dash takes us seven miles to Dawson Creek, thirty hours out of Edmonton.

Next week Uncle Joe may take you north of Dawson Creek where mickes sell for three fims. Until then, goodbye, kiddies!

He—Where can I get hold of you?
She—I don't know. I'm awfully ticklish.

CORRESPONDENCE

On Oct. 2nd last a new Gateway policy was announced in a fine editorial. The gist of it was: "We must constantly bear in mind that an undergraduate newspaper is the voice of its students, published by the students—for the students. It should therefore express the views of the average cross-section of the student body, and should cater to their interests." Since then this policy has been ignored on several occasions, not by the Editor-in-Chief, but certainly by the Friday editor. Probably that Aggie who presumes to be a newspaper man did not even read his chief's declaration.

At the time of the Freshman elections last fall the Engineers' slate was openly attacked in The Gateway columns, a glaring breach of policy. An apology was made and accepted. Recently the Friday editor again attacked the Engineers through the medium of a news article. We quote from the front page of the January 22nd Gateway: "The comparison being made directly with that decrepit organization, the E. S. S." Are such statements to be tolerated in news article written by the Friday editor himself? Not if The Gateway adheres to its policy. Mr. Bevan, therefore, should explain his attitude, or apologize again. Remember, "sir," that impartial readers hold the entire study body responsible for your statements. You are responsible to the student body not to the Ag Club, but you do not present the general student opinion when you refer to the largest faculty club on this campus as a "decrepit organization."

For some time now much has been said about the feud between the Engineers and Aggies. Good. The University would be very dull without it. But let us keep the rivalry within the bounds of such columns as "Slide Rule Slants" or the Engineer edition of The Gateway. If the Aggies wish to put out a Gateway to match the Engineers' edition, we shall welcome the competition, no matter what they call us or our organization. But we do not want an Aggie edition every Friday. That is what we are getting when a thoughtless editor is allowed to usurp the authority to use a front-page news item announcing the Ag Ball as a means of attacking the Engineering Student Society, and in the same edition to use as a column filler on the Sport Page a similar news item concerning the Engineers' Ball.

The Gateway is our paper, Mr. Editor, as well as the Aggies'. You are responsible to us for your statements, and we are entitled to an explanation for your attitude towards our organization.

—4th Year Chemicals.

"SURE I'M HAPPY!"



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Picobac

GROWN IN SUNNY, SOUTHERN ONTARIO

Theatre Directory

ODEON

RIALTO—Starts Friday, "Commandos Strike at Dawn," starring Paul Muni, Anna Lee and Lillian Gish.

VARCONA—Double feature currently showing, George Formby in "It's In the Air"; also "Shipyards Sally," starring Gracie Fields.

FAMOUS PLAYERS

CAPITOL—Beginning Thursday, a thrilling sea drama, "The Black Swan," starring Tyrone Power and Maureen O'Hara.

EMPRESS—Last two days, "The Avengers"; added hit, "Arkansas Judge," starring Roy Rogers.

GARNEAU—Coming Thursday, Friday and Saturday, "Here We Go Again," with Fibber McGee and Molly, Edgar Bergen and Charlie McCarthy, plus "Swamp Water" and News.

PRINCESS—Currently showing, "Moon Tide," with Jean Gabin, Ida Lupino; also "A Gentleman at Heart," with Cesar Romero.

STRAND—Currently showing, two grand hits, "Flight Command" and "Come Live With Me."

"Pocket Books", 150 Titles, 39c each

Oxford Pamphlets on World Affairs, 10c each

THIS DEPARTMENT IS OWNED AND OPERATED BY THE UNIVERSITY OF ALBERTA

UNIVERSITY BOOK STORE

Shelters Not Needed If Engineers Heeded

1. In case of an air raid alarm, "Run." It doesn't matter where you run as long as you run like hell. It is suggested that you equip yourself with track shoes, so that you will have no trouble getting over the people in front of you.

2. Always make the most of an air raid alarm: (a) if you are in a bakery, grab a pie; (b) if you are in a movie, grab the nearest blonde; (c) if you are in a bar-room, grab the nearest bottle.

3. During an air raid alarm, yell bloody murder. It adds to the confusion and scares hell out of the kids.

4. If you find an unexploded bomb, shake it—the damn firing pin may be stuck.

5. If an incendiary bomb falls in your neighborhood, throw some gas on it (you can't put it out, so you may as well have some fun).

6. Always eat garlic, onions, or limburger cheese before entering an air raid shelter. (It will make you over-unpopular with the people of your vicinity, but will help alleviate crowded conditions.)

7. Do not pay any attention to your air-raid warden. If he won't get out of your way, knock him down, as he is just trying to save the best places for his friends, anyway.

8. The particular properties of the bomb release hydrogen when water is placed on it; in fact, ignites the hydrogen in the air resulting in rapid combustion (in fact, it explodes with a helluva mess).

9. If you are the victim of a direct hit, don't go to pieces, be still and no one will notice you.

Dear Cousins:

Your Uncle has a job at last—the first time he has worked in 48 years.

We are rich now—\$17.25 every Thursday—so we sent to T. Eaton Co. for one of these new-fangled bathrooms like you rich people have down East.

It came, and we had her put up so we could use it. Over on one side of the room is a big white thing like the pigs drink out of. You can climb right in the thing and pour water all over you at the same time.

On the other side of the room is a little white gadget on the wall called a sink, for light washing, like hands and face. They also sent up a roll of writing paper, but it is kind of cheap, I think—it rips easy.

But over in the other corner—wow! They got a thing over there you put one foot in and wash till it gets clean, then you pull a chain, and swish! you got fresh water for the other foot!

Yours truly,
Cousin Abner.

P.S.—Two lids came with the damn thing, and we don't need either one of them, so maw uses one for a bread board and we framed Grandpa's picture in the other one.

HAVE YOU HEARD ABOUT

The Little Moron who was so shy she went into the closet to change her mind?

The Little Moron who cut off his hands so he could play the piano by ear?

The Little Moron who stayed up all night studying for a blood test?

The Little Moron who took a ruler to bed to see how long he slept?

The Little Moron who built a stepladder with no steps, to use when washing basement windows?

The Little Moron who cut off his arms so he could wear a sleeveless sweater?

The Little Moron who put a box of matches on the mantle at noon and waited for the clock to strike one?

The Little Moron who hurt his head when the seat fell while he was putting some toilet water on his hair?

The Little Moron who went to bed with an alarm clock because he heard it was fast?

The Little Moron who thought Father's Day was nine months before Labor Day?

The Little Moron who wouldn't talk through a screen door because he was scared he'd strain his voice?

The Little Moron who pushed a cow over the cliff so she could hear the Jersey Bounce?

The Little Moron who thought that virgin wool came from the sheep that could run fastest?

The Little Moron who cut off his fingers so he could write shorthand?

The Little Moron who made love to his girl friend under a toadstool? He thought it was a mushroom.

The Little Moron who 'phoned his friend at 3 a.m. and apologized by saying, "I'm sorry to 'phone at this time. I hope I didn't disturb you."

To which the other Little Moron replied, "Oh, no. I had to get up to answer the 'phone anyway."

The Little Moron who spent \$1,000,000.00 to get rid of his B.O., then found out that people just didn't like him?

The Little Moron who took his nose apart to see what made it run?

The Little Moron who asked the painter to get a good grip on the brush because he wanted the ladder for a while?

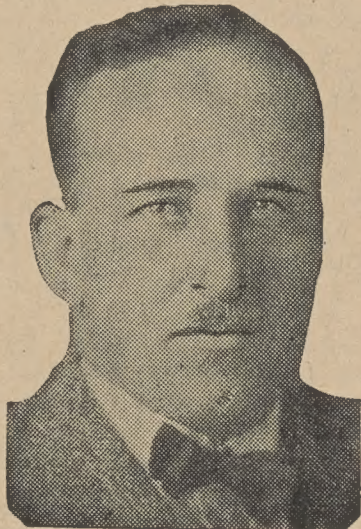
HE DID HIS BEST

A young husband was asked by his bride to copy a recipe from the radio. He did his best, but got two stations at once. One of them was broadcasting the morning exercises, the other the recipes. This is what he took down:

"Hands on hips, place 1 cup of flour on the shoulders, raise the knees and depress toes and mix thoroughly in ½ cup of milk, repeat six times. Inhale quickly ½ teaspoon baking powder, lower the legs and mash 2 hardboiled eggs in a sieve, exhale, breathe naturally and sift in a bowl. Attention! Lie flat on the floor and roll in the white of an egg, backward and forward until it comes to a boil. In 10 minutes remove from fire and rub smartly with a rough towel. Breathe naturally, dress in warm flannels and serve with soup."

Leading Scientists at the U. of A.

GEOLOGIST



DR. RUTHERFORD

Dr. Rutherford started his geological career as chief of one of Dr. Allan's field parties, earning a good reputation in that capacity. He took his B.Sc. in Geology at Alberta and graduated in 1919. From here he went to Boston Tech and spent a year there. This was followed by two years at Wisconsin, where he received his Ph.D. degree.

During his student days he worked with the Canadian Geological Survey as field geologist. He came back to Edmonton as field geologist for Industrial Research Council, and at the same time became a lecturer on the staff at Alberta. Much of his work was done in Canadian foothills and Peace River country, where he investigated the water situation. In 1937 he became an associate professor, and for the last few years has been consulting geologist for Brown Oil.

Renowned in classes for his humor and his attributes of a man, namely, (1) carry a \$ J. I. Case with a Cock-shut movement (those things on your wrist are too effeminate); (2) smoke a pipe (again, cigarettes are too effeminate) and wear a bow tie; (3) carry a jackknife and a pair of scissors; (4) carry the government library card from 103rd Street in a prominent place.

AH COW

The cow is a mammal. It has six sides, right and left, upper and lower, and back and front. At the back it has a tail on which hangs a brush. With this he sends the flies away so they don't fly into the milk. The head is for the purpose of growing horns and so his mouth can be somewhere. The horns are to butt with and the mouth to moo with. Under the cow hangs milk. It is arranged for milking.



When people milk, milk comes and there never is an end to the supply. How the cows does it I have not yet realized, but it makes more and more. The cow has a fine sense of smell, and one can smell it from far away. This is the reason for the fresh air in the country.

A man cow is called a bull. The cow does not eat much, but what it eats it eats twice so that it gets enough. When it is hungry it moos and when it says nothing at all it is because its insides are full up with grass.

—Quoted from Some Place.

"I had to fire my new stenographer today."

"Why, wasn't she experienced?"

"No. I told her to sit down and she looked around for a chair."

CIVIL ENGINEER



PROF. R. M. HARDY

Among the many men who make engineering their work and their hobby, one finds Prof. Hardy of the Civil Engineering staff here at the University of Alberta.

We are proud to know that he is a westerner, having received his B.Sc. degree in Civil Engineering at the University of Manitoba in 1929. During the following year he gained his Master's at McGill University. He came to Alberta in the fall of 1930, and has since expounded to the student engineers the whys and wherefores of structures, what one can do and cannot do with concrete, and has made a beginning on the new subject of soils as it applies to the work of the civil engineer. (He does eventually discuss the theorem of least work with the undergraduates, but includes a warning that the least work may sometimes lead to more work.) He spent two summers at the University of Michigan doing post-graduate work, and at a later date was given leave of absence from his duties here to spend a year at Harvard to gain further information and experience in the subject of soil mechanics.

As an associate member of the Engineering Institute of Canada, he is active in the organization's work, having held several executive positions in the local branch. He holds the title of Dominion Land Surveyor. In and out of the University we find Prof. Hardy dealing with work from the actual civil field.

To many on the campus, Prof. Hardy becomes Sqd. Ldr. R. M. Hardy, Officer Commanding the University Air Training Corps. Included in his duties is that of lecturer in navigation and related subjects.

A man of several interests, possessing a wide knowledge of his several subjects with a definite ability to "put across" his material and opinions, Prof. Hardy has earned the respect of all with whom he has come in contact.

ODE TO A BIRD

I always pray I shall never see
A bird in anything but a tree,
If there is one thing I abhor
It's to find them lying on the floor.

I must admit there is little time
To think—"What shall I do with mine?"
But why not stop and reconsider
Before you show the world your dinner?

I know you'll say that's hard to do,
The start must have the follow through;
And after all, I guess you're right,
But still, it keeps us up all night.

When you deposit one or two,
Here is the thing that you should do:
Just use a bog on right or left,
The one that's closest is the best.

And just one thing remember, please,
That birds were really meant for

CHEMISTRY HEAD



DR. O. J. WALKER

Dr. O. J. Walker is well known to Engineering students as Acting Head of the Department of Chemistry and popular Honorary President of E.S.S. All engineering students have the fortune (or misfortune) to meet Dr. Walker in his famous Chem. 40—Inorganic Chemistry. The Chemical Engineers also have dealings with him in Chem. 58, Chem. 62 and the Journal Club.

Dr. Walker received his undergraduate training at Saskatchewan, graduating from there with a B.A. Later at Harvard he took post-graduate work and gained his M.A. From there he returned to Canada and married a talented young musician, the sweetheart of his undergraduate days. Dr. Walker then went to McGill University, received his Ph.D. in Chemistry, and incidentally became a father (O. J. Junior comes into the picture here!)

Dr. Walker came to the University in the early '20's. Always he has been a champion of the Engineers, serving once before, in 1928-29, as Honorary President of E.S.S. An active member of the Canadian Institute of Chemistry and the American Chemical Society, Dr. Walker has consistently been interested in the University Chemistry Club and related student activities.

In addition to the heavy teaching load which he has carried, Dr. Walker has carried on considerable research work, notably on fluorine and water. He has published papers on "The Removal of Fluorine from Alberta Waters," "The Determination of Small Amounts of Fluorine in Water," etc. One of Dr. Walker's most recent publications is "Selenium in Soils, Grains, and Plants in Alberta."

Dr. Walker is also well known as one of the University's outstanding southpaws. He is fond of athletics, is an active badminton player, and enjoys outdoor vacations at his Jasper summer cottage.

Familiar to most engineering students are Dr. Walker's two sons, Jimmy and Wilf. Jimmy graduated in Chemical Engineering in 1942, and is now working in a war plant at Shawinigan, Quebec. Wilf is a Freshman here this year, and is building himself a reputation as an ardent swing fan.

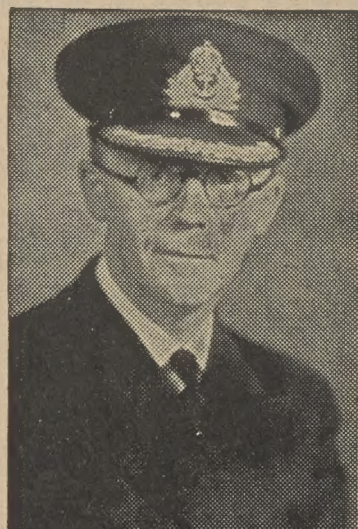
A breezy matron from Chicago was visiting among the First Families of Boston, and the Back Bay dowagers were proceeding to put the middle westerner in her place.

"Here in Boston, you know," one of the good ladies remarked at tea, "family is the thing that counts. We are interested only in breeding."

"Well," commented the lady from Illinois, "out in Chicago we have a lot of fun too, but manage to have some outside interests."

—GORDON WEIR.

SAILOR



COMMANDER E. G. CULLWICK

On January 1st, Professor E. G. Cullwick, now Commander Cullwick, R.C.N.V.R., left our campus for Ottawa to assume his post as founder and head of the Electrical Engineering Branch of the Royal Canadian Navy. The department of Electrical Engineering was sorry to see such an excellent professor and head leave, but were proud that he should be chosen for such an important duty. Commander Cullwick justly deserves the great trust placed in him by our Government.

With the coming of the war, the Navy was faced with the problem of training personnel. Largely through the efforts of Commander Cullwick, the first Naval Electrical course was established on this campus in the spring of 1942. Under his skillful organization and direction, naval electrical training has developed extensively, and Lt. Commander K. A. Mackenzie, R.C.N., naval liaison officer to the University, has said: "The University of Alberta has been a pioneer in this work, and today offers the most comprehensive electrical course in Canada. Other universities might well follow suit, as the number of men required for this work will mount."

In addition to this, a newly established Naval Radio Director Finding course is now in session at this University, and a third naval electrical course will commence shortly.

We feel that Commander Cullwick has just made another step forward in what has already been a career of which he may be proud.

He attended Downing College, Cambridge University, as a Foundation scholar, and obtained his B.A. in 1925 and his M.A. in 1929. From 1925-26 he was associated with the British Thomson Houston Company; he was then employed by the Canadian General Electric Company from 1926-28. In 1928 he was appointed Assistant Professor of Electrical Engineering at the University of British Columbia. He returned to England, and from 1934-35 he was a lecturer in science at the Royal Military College. In 1935 he was appointed Associate Professor of Electrical Engineering at U.B.C. Since 1937 he has been Professor and head of the Department of Electrical Engineering here at U. of A.

At his new post, Commander Cullwick will exercise his scientific ability which he has exerted in the past for the advancement of science and engineering education.

The ship of state for an even keel
Needs tons and tons of corset steel.
The die is cast, the fates have written,
That ladies now must bulge for Britain.

It is officially announced that the Japs have taken Sal Hepatica—the war office has confirmed the report, but doubt their ability to hold it. A later dispatch stated that the strain on the rear is tremendous; they have been caught on the run several times trying to evacuate along the lines; several flank movements have been made—while the action at times brings heavy gas attacks.

The Japs have tried to suppress the report, but it leaked out, and the Allies got wind of it. The Japs now realize the value of a scrap of paper.

To Build Or Not To Build

By A. H.

The boss couldn't post me on a moment's notice to McMurray for the summer to build airports! He couldn't send the key office man into the wilds on any small survey job! Whom did he think he was shoving around? I would quit before I moved an inch from my desk!

The next day I took the train to McMurray. At the station an Aggie, going north also, found it impossible to leave behind his best friend, Bessie, a decrepit cow, and decided to take her along. After being instructed by the conductor to put the cow at the back of the train, he sat down beside me assuming the Aggie expression of utter confusion. After an hour of boredom, I opened conversation by estimating we were travelling about 50.

"My God!" he whispered in awe, "Bessie sure must be legging it out!"

On arriving at McMurray, due to the shortage of men, we organized a survey party consisting of chain-women, rodwomen and instrument-women to run the line. After four months of utter bliss, and still no signs of an airport, we left those idyllic shores and flew back to grim civilization.

BEERMEN SWELTER IN TRAIL SMELTER

How would you like to be sitting at an open window with temperature at 110, looking down on the city of Trail and the Columbia River, with a barren mountain on the other side of the city staring you in the face, and have the delicate scent of H₂O and SO₂ fumes wafted down to you from the smoke stacks? It has the reputation of being the hottest city in Canada, and that isn't hard to believe.

There were about 300 students there this summer from Western Canadian universities. On June 12th the Engineers from U.B.C. and U. of A. held a pointer dance (sweater dance to you). The practical nature of the engineers was shown in their choosing the only dance hall in town that had a beer parlor on either side. Possibly this was partly responsible for the dance being so successful.

There seemed to be enough variety of amusement to satisfy anyone's particular taste, and each person seemed to have a particular attraction. Some like to spend their spare time at Sandy Island, others at Nelson or Playmor, and still others just went as far as Hunt's Confectionery (didn't they, Harris?).

Here, fellows, is a problem, so whip out your slip stick. How much energy would you use riding a bicycle from Trail to a secluded spot on the river bank? If you want experimental verification for your results, ask Sather or Donald. Incidentally, both girls were red-headed; maybe you had better consider that in your estimate.

Before leaving, some of the students were taken through the Warfield plants, and saw the whole of Warfield—the rest of us just saw the hole of Trail.

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The Sixtieth Chronicles

By R. H. Lamb

1. As the forty second year of the Twentieth century drew to a third quarter, there came to the city of Edmonton a band of wandering Engineers.

2. And they did take up residence in the school of cogs and transits of the house of kings.

3. Among those who came were men from the south, and Hermie, and men from the north, and Hermie, and men from the east and west, and Hermie. And lo! Strange were their manners and customs.

4. On the first day the sun did rise, but they did not. As the hour advanced unto noon, they came with weary steps unto the temple of learning.

5. And it came to pass that the rites of initiation and registration were held that day, in the room of the inner temple known as Con Hall.

6. And later the chief priest came to preside, and he spake many wise words unto them, saying:

7. "Verily, verily, I say unto you, you are as dirt on the ground, and I shall walk upon you."

8. And it was so.

9. But they were of cheerful mind and took consolation in that which maketh the heart of man glad, namely, the proverbial forty beers.

10. There were those who sought the maidens of the temple, and they welcomed them, and enticed them with strange music that came from the lyre known as the juke box.

11. And they were glad.

12. And it came to pass that after the first week had come to a close,

they had not one piece of gold, yea not even one small piece of gold with which to buy even one short beer.

13. And great was the wailing and gnashing of teeth and wearing of sackcloth and ashes.

14. Each day they went to the place appointed by the great priests, at the eighth hour. And as the multitudes gathered and even as those who held authority began to talk unto them, there arose a noise like that of many people wailing in their sleep, called by the uncultured "snoring," and great was the displeasure of those who held authority.

15. And it came to pass that after one lunar period as the multitude gathered in the inner temple, they were laden with papers that were invisible to the priests, for the time of testing was at hand.

16. But the priests kept a watchful eye, so they could not drink of the knowledge thereon.

17. So, great was their disgust, and the tearing of hair and the wearing of sackcloth and ashes.

18. So they did thumb their noses at those who held authority, and took themselves into the world, and great was the merriment of all.

19. Thereafter, all imbibed from the fountain of learning, with great gusto, for after the second lunar period another time of testing did arrive, and great was the concern thereof.

20. And it came to pass that after this period of testing, the priests did sneer and great was their merriment at the destruction which they

had caused.

21. So they departed into the wide world once more.

22. But as if drawn by loadstone, they went to a local tavern known to all of ill-repute as the "Barn."

23. Into the tavern they brought much which maketh the heart of man glad, from the place appointed to vendor such things, by the king.

24. Here they were joined by the maidens of the temple, and all caroused until the cock crowed.

25. But after the crowing of the cock, many strange visions appeared unto them. It seemed like toads, lizards, and elephants of a pinkish hue did chase them.

26. And great was the wailing and holding of heads and gnashing of teeth.

27. And the day was spent in the wearing of sackcloth and ashes, and all repenteth that which they had done.

28. And it came to pass that some of the Engineers did not come to pass, and those who held authority came and spake unto them saying:

29. "Verily, verily, take unto thyself arms and learn the art of warfare, for truly thou slunkest."

30. And they rejoiced and were envied by those who stayed.

31. And herein all distinguished themselves.

32. And surely as the days pass into months and the months into years, they shall go forth and meet their enemies, and great shall be the lamentations of their enemies.

33. And thus endeth the first book of the Sixtieth Chronicles of the gospel according to the Engineers.

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INTELLIGENCE DEPARTMENT



"I won't offer you a cocktail, Mr. Brown," said the hostess, "since you are head of the Temperance League."
 "No, I am president of the Anti-Vice League."
 "Oh. Well, I knew there was something I shouldn't offer you."

Why was the Statue of Liberty surrounded by water? Because the professor didn't see her with her hand up.

Capt. Smith was a very religious man, and the language of Corp. Jones much given to profanity. So the Captain spoke to Jones on the subject, reprimanding him severely. Just as he finished a German bomb landed near them and covered them with debris.

"Well, goddam their Nazi souls to hell," the Captain said, then added, "As Corporal Jones would say."

A romantic pair were in the throes of silence as the car rolled smoothly along an enchanting woodland path, when the lady broke the spell:

"John, dear," she asked softly, "can you drive with one hand?"

"Yes, my sweet," he cooed in ecstasy of anticipation.

"Then," said the lovely one, "you'd better wipe your nose, it's running."

A drunk, watching police dragging the river, "Whatcha doin'?"

"Looking for a drowned man."

"Whatcha want one for?"

Cockney Bill, blown through a window by a bomb, remarked when he came to, "Crikey, I got outa there just in time."

The fellow who had trouble with rats in his basement eating the apples and nuts he had stored there finally set a trap by each box. Next day he was down in the cellar looking at the traps when his wife called down:

"Did you get any, dear?"

"Yep. I got one."

"Did you get it by the apples?"

"Nope."

When asked in Poly Ec. for an example of indirect taxation, Buckley replied, "Dog tax, the dog doesn't pay it."

Maisie was in a bar having a beer when a friend from England walked in.

"Aye say, Maisie, are you 'aving one?"

"No, it's just the cut of my coat."

Drunk—Shay, can you tell me where the other side of the street is?

Cop—Why, of course, it's over there.

Drunk—That funny; fellow over there said it was over here.

A Chinese cook was walking through the woods. He turned around to see a grizzly bear following him, smelling his tracks.

"Hm," he said, "you like my tracks? Velly good, I make some more."

Johnny was rushing to school and praying hard not to be late.

"Oh, please God, don't let me be late. Oh, please, I can't be late again."

In his rush he tripped over a protruding root and fell.

"Well, goddamighty, you don't have to push."

Co-ed to boy friend, who was driving wildly down the road: "For Heaven's sake, use both hands."
 B.F.—Can't. I need one to steer with.

During a heavy bombardment of an English city an ARP warden called down into a public shelter, "Are there any expectant mothers down there?"

A feminine voice replied: "Hard to say. We've only been down here a few minutes."

Ezra—Who's that close-mouthed gent over thar?
 Zeke—He ain't close-mouthed. He's awaiting for the janitor to get back with the cuspidor.

When asked in his first aid exam what to do if a woman's dress caught fire, Ripley wrote: "Throw her to the floor and rape her in a blanket."—Apologies to Prof. Salter.

When she calls you to her bedroom,
 In the middle of the night;
 And beneath her half-closed eyelids
 You detect a tell-tale light;
 When her bosom heaves tumultuously,
 Like the tide upon the ocean,
 And her voice is low and tender,
 Betraying her emotion;
 When she beseeches and implores you,
 And she grasps your trembling hand,
 To alleviate her sufferings
 From the torture of the damned
 —That's asthma.

"I took the recipe for this cake right out of the cook book."

"You did perfectly right. It never should have been in."

"Itches," says Col. Stoopnagle, "is something that when a recruit is standing at attention his nose always."

"Why are you washing your spoon in your finger bowl?"
 "So I won't get egg all over my pocket."

"Do you know who I am?" shouted the irate colonel to the private who neglected to salute him.

"Do you know who I am?" he repeated as the soldier looked blankly at him.

"Here, boys," said the private to his friends. "Here's something good. A colonel who doesn't know his own name."

Two men decided to have a sandwich, so they went into a cafe. The first one ordered a beef tongue sandwich.

"Gosh!" said the other, "I couldn't bear to eat anything out of a cow's mouth. Give me an egg sandwich."

* Miss Van Upsnoot—Circumstances compel me to decline a marital arrangement with a man of no pecuniary resources.

Stupe—Er—ah—I don't get it.

Uppy—That's what I'm telling you.

Nurse to Prof. in hospital waiting room—It's a boy.
 Prof.—What does he want?

Inspecting Officer—What have you done to purify the drinking water?

Sergeant—Well, sir, first we filtered it, then we boiled it.

Officer—Very good, sergeant.

Sergeant—Then we drink beer.

An enthusiastic golfer came home to dinner. While he was eating his wife said to him, "Johnny tells me he caddied for you this afternoon, dear."

"You know," said the golfer, "I thought I'd seen that boy somewhere."

Then there was the lipping shoe salesman, who said, "I'm thorry, Mith Thmith, but I'll have to look up your thize."

Two small negroes were standing on a street corner. One asked the other, "Is you fo' or is you five?"
 The other replied, "I don't know."
 "Well," said the first, "do de gals bothah you?"
 "No."
 "Then you is fo'."

Voter (being canvassed)—I wouldn't vote for you if you were St. Peter himself.
 Candidate—If I were St. Peter you couldn't vote for me. You wouldn't be in my district.

"And how is your good wife, Sultan?"
 "Oh, she's all right, but the other forty-nine are more fun."

In spite of rationing, a lot of local motorists are still fueling around.

Magistrate (to nervous bridegroom)—I can't marry you. If this girl is only seventeen, you'll have to get her father's consent.

Bridegroom—Consent! Say, who do you think this old guy with the shotgun is—Santa Claus?

A man visited his banker the other day and asked, "Are you worried about whether I can meet my note next month?"

"Yes, I am," confessed the banker.

"Good!" said the client. "That's what I'm paying you seven per cent. for."

A Scotchman was presented with a pint flask of Scotch whiskey. Walking home briskly with the flask in his hip pocket, he did not quite sidestep a car that knocked him down. Getting up and limping slowly down the road, he felt something trickling down his leg. "Oh, Lord," he groaned, "please let that be blood."

The burglar, finding a lady in her bath, covered her with a revolver.

If a girl's a good loser at strip poker, is isn't always good sportsmanship. Sometimes it's just plain conceit.

A man, after horsing around, wakes up and finds himself a groom.

There was once an old man in Siberia,
 Whose life grew drearier and drearier,
 Then he broke from his cell
 With a hell of a yell,
 And eloped with the Mother Superior.

Much is blamed on the stork that should properly be blamed on a lark.

An unobtrusive gentleman in a museum was gazing rapturously at a large painting of a shapely girl dressed in only a few strategically placed leaves. The title of the painting was "Spring" Suddenly his wife snapped, "Well, what are you waiting for? Autumn?"

A bunch of the boys were feeling merry, so Mary got up and went home.

Definition of a rhumba: An asset to music.

"Halt! Who goes there?"

"American."

"Advance and recite the second verse of 'The Star Spangled Banner'."

"I don't know it."

"Proceed, American."

Bub—Have you got a picture of yourself?

Roommate—Yeah.

Bub—Then let me use that mirror. I want to shave.

Mort—What time is it getting to be?

Babe—I don't know, but it was Saturday night when you came.

"Does it make any difference on which side of you I sit," asked the sweet young thing.

"Not a bit," replied the bold young man. "I'm ambidextrous."

Mother—What are the young man's intentions?
 Daughter—He's keeping me pretty much in the dark.

He—Going to have dinner anywhere tonight?
 She—Not that I know of.
 He—Say, you'll be awfully hungry by morning.

Old Lady (tickling baby under the chin)—And where did you come from?
 Baby—Goo!

Alert Stude (pointing to girl ahead)—Her neck's dirty.

Sleepy ditto—Oh! Does her?

Prof.—I want you to give me the mood of the following sentence, "The farmer led the cow into the pasture." What mood?

Braintrust—The cow.

Latest invention: Black pants for lightning bugs during blackouts.

"There's only one thing wrong with me, blondie. I'm color blind."

"Yo' sho' mus' be, mistah."

Two Cockney women were discussing the blackout. Said one, "The worst of these blackouts is that you're liable to be blasted to maternity at any time."

"Yes, and you'd never know who done it, either."

First Sailor—Did she blush when her shoulder strap broke?

Second S.—I didn't notice.

Drunk, in telephone booth: "Number hell—I want my peanuts."

"I wish we'd get a few shipwrecked sailors washed ashore," mused the cannibal chief. "What I need now is a good dose of salts."

George Ballantyne says it was so cold in his boarding house the other night the Varga girls came down off the walls and got in bed with him.

The sofa sagged in the centre,
 The shades were pulled just so,
 The family all had gone to bed,
 The parlor lights were low,
 There came a sound from the sofa,
 As the clock was striking two,
 And the student closed his textbook,
 With a soft, "Thank God, I'm through."

We wonder if infants have as much fun in infancy as adults do in adultery.

Co-ed—Did I ever show you where I was tattooed?
 Boy Friend (hopefully)—No.

Co-ed—Well, let's drive down that way then.

Wife—Couldn't you think of anything better than coming home in this drunken condition?

Husband—Yes, m'dear, but she was out of town.

Dorothy Dix says if all the co-eds were laid end to end, she wouldn't be surprised at all.

Ag—Give me a stamp for this letter.

Postal Clerk—Your letter is too heavy, it needs two stamps.

Ag—Don't be foolish. If it had two stamps it would be heavier still.

Feudal Lord—I hear you misbehaved while I was away, son.

Knight—In what manor, sir?

Big drouth in southern Alberta—the trees are chasing the dogs around.

For Whom the Belle Peels

The girl who, incandescent, glows

When sun and wind have kissed her,

Is less alluring to her beaux

When she begins to blister.

Her lawyer was a bashful man,
 And faintly blushed when he began
 The poor dead husband's will to scan. . .

He smiled while thinking of his fee,
 Then said to her, quite tenderly:
 "You have a nice fat legacy!"

That night while lying in his bed,
 With bandages about his head,
 He wondered what the hell he'd said.

ENGINEER RELATED HOW PLANES CREATED

The following is an extract from the speech delivered to the last E.S.S. meeting by Mr. Aides, Assistant Chief Engineer, T.C.A., and appears through the courtesy of Mr. Aides and the T.C.A.

The study of airplane design must incidentally be a study of airplane designers, and should preferably include a portrayal of the conditions under which commercial airplanes are commonly developed. The following article by Mr. Osborn of the Curtiss-Wright Corp., while a delightfully vivid misstatement of the situation, certainly leaves the most accurate impression to be found anywhere. In view of the well-known outstanding performance of Curtiss-Wright airplanes, it is, of course, evident that Curtiss-Wright airplanes are not designed by the following methods:

"Lately we have been very much surprised to find that airplane design and construction seem to be very mysterious to some people associated directly with the industry, as well as to the general public. They have no idea why a biplane is used for one type of airplane and a monoplane for the next type. They probably wonder why the engine installed was selected, and why the cabin or cockpits are arranged as they are. In fact, in some cases they have even wondered why the airplane was ever built. Realizing that some information along this line would probably be appreciated, we have interviewed a number of experienced designers we know, to learn from them the reasoning and processes by means of which a new airplane is created. They were glad to tell us their experiences, and we have condensed all of their stories into the following, which might be said to be the high points in the life of an average airplane in its journey from the drafting board to the field:

"As his favorite layout draftsman is working up some advertising for the sales department, the Designer is much discouraged to find that he will have to use an inexperienced man and do the figuring and calculation himself.

"Designer calls for a wing span of 37.5 feet. Layout draftsman misunderstands his writing and lays out the airplane to have 375 sq. ft. of wing area.

"Airplane originally laid out as a monoplane. New Department of Commerce Inspector shifted to the district. New inspector has a great preference for biplanes, so design is changed to a biplane.

"President sends in word that speed is essential in all new aircraft of the immediate future, and airplanes must be designed mainly for speed. Design is altered to suit.

"Engine selected is the one manufactured by the Chief Engineer's golfing partner. Designer asks the world howinell he can turn out a good ship when he has to use an engine like that one? Chief Engineer's golf game gets poorer so that his partner beats him regularly. Designer ordered to shift to the best engine available in another company. Designer asks the world howinell he can turn out a good ship around an engine like that one?

"President sends in a note stating that the watchword is economy, and that all new designs should have cheapness of construction and economy of operation as their major criteria. Design is altered to suit.

"Designer hears that the Whoosis Airplane Company is laying out a competing model with gull-shaped wings. Immediately scraps his design and starts over again with gull-shaped wings. Simultaneously, the designer of the Whoosis Airplane Company has scrapped his drawings and starts new layouts using butterfly-shaped wings, after hearing that the Whatis Airplane Company is proceeding on that basis.
 (Continued on Page 5)

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Babbleography of Class '43

And it came to pass that six score and eight chosen ones entered into the synagogue of learning twenty-three thousand, two hundred and sixty-eight moons A.D. (slide rule accuracy).

Yea, and verily did they enter in stately health and learning and happiness ready to journey forth into the world of our fathers spreading their doctrine whatsoever that may be. (Ed. Note: Not to be confused with the Aggies.) Whereupon started the four year siege when the six-score and eight were set upon by the Pharos of the Lord High Executioner. After the November fray were left many, yea, countless scars of battle which caused many to perish along the wayside. The Pharos, fearing that the life of the young wise men was enjoyable, be-set upon them another plague on the eve of the anniversary of A.D. 0.0. Yea, and many were smitten, and some were smot. Them that lived on set forth to polish their goblets and oil their elbows, and with permission of the elders, set forth a great feast. And great was the merriment thereof. And Bacchus reigned supreme. And lo, after the passover came the hangover (and were they low!) But nay, the handwriting was on the wall, and several elders on the floor. And the elders spake and decreed throughout the land that no more should there be such merriment, and the festive board should be torn asunder for generations to come. No more would the cup runneth over.

And, by Gads, from the far east there came wise men bringing glad tidings and spice in the form of jokes to set the favored children forth in the gales and icy blasts to



A Miner's Nightmare.

blaze new trails and locate the wind-dows in the hall of Pembina.

Then came half a fortnight of revelry while Delila Hawkins pursued the unwilling (?) Samsons. They chased by day, and they chased by night, and for some the chase never ended.

Then followed a long period of turmoil and strife when the diminishing echelons of chosen few strove to sustain their stalls in the temple. And with the spring the mighty hosts of the Temple of Learning sallied forth in orderly procession to the lands of the Saracen Indians to bridge mighty rivers and march many leagues. Whereupon there fell a fortnight of famine on our heroes, and they wasted away, and they burned in the sun by day and froze in the tents by night.

And it came to pass at the Vernal Equinox that the legions did desire new leaders. There gathered many carrying banners led by a gentle

maiden robed in stately unattire. Yea, and through the halls of learning the array set forth, and there was great shouting and challenging of the enemy to do battle.

On the last moons of the four year siege the battle scarred veterans of only three score less nine did return to stand on the brink of a great abyss through which flowed the River Camrose. And the Pharos did push, Prodigals did resist, and great was the conflict thereof.

And it is prophesied that each of the valiant warriors will be given a ring as a symbol that he can go throughout the world as walkers of streets dodging cold drafts, or sored lightning, or dig sewers, while the "Chosen Four" will go throughout the world giving their talents to all peoples, and wrestling from the bowels of the earth precious metals and jewels to the advantage of all men, even unto the street walking chemicals.

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and Airmen Prefer

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chocolate made

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AIRCRAFT ANXIETY

(Continued from Page 4)

"President returns from a tour around the country. Circulates notes to the effect that the present trend is toward better vision for the pilot, and that all other features, including speed and cheapness of construction, should be compromised to obtain better vision for the pilot. Design is altered to suit.

"President sends in word that the crying need of this country today is a good 5-cent cigar. Design is altered to suit.

Shop makes an error, in building the fuselage a foot too short. In exchange for previous shop favor in covering up one of his errors, the designer writes a long treatise to the Chief of Engineers pointing out the trend to shorter fuselage lengths, suggesting that the fuselage be made shorter by 1 ft. Chief Engineer does not grasp the full meaning of the obscure part of the designer's calculations, so issues order to have the nose of the fuselage shortened by 1 ft. Designer and Shop Superintendent talk it over, and decide they had better just cut 1 ft. off of the nose and say nothing more about it.

"Engine finally arrives for installation in the ship. Turns out that the engine company had decided to build a nine-cylinder engine instead of a seven-cylinder engine. Engine mount designed for a seven-cylinder engine. Long correspondence between airplane company and engine company to determine if two cylinders shall be taken off or if engine mount shall be changed. Matter finally settled by flipping coin. Engine mount is changed.

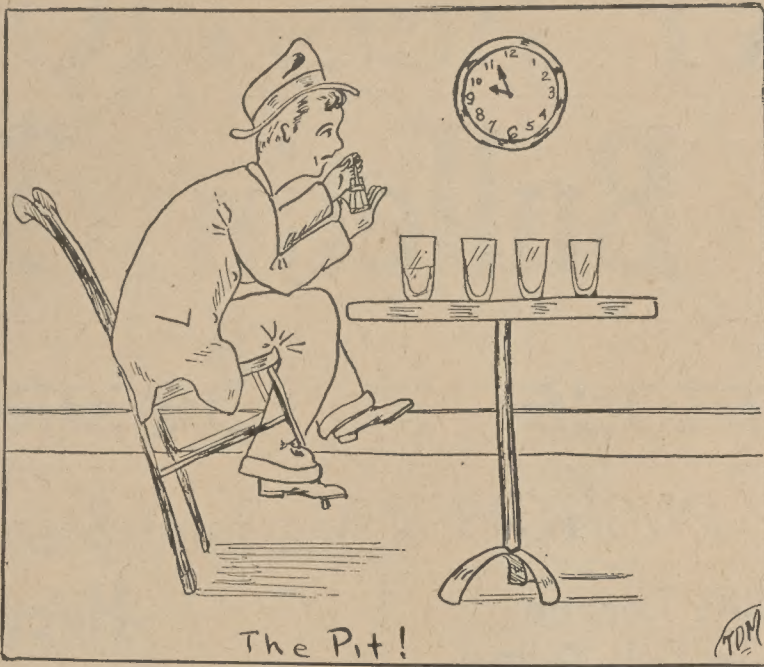
"On installation of the engine it is found that the carburetor interferes with the center landing gear fitting. Engine sent back to the engine plant to be made into a down-draft carburetor. When the engine returns it is discovered that the new carburetor interferes with the oil tank. Send engine back to engine plant to be made over into a solid-fuel injection engine.

"None of the shop cowl workers understanding English, Project Engineer waves his arms around in the air to show them what type of wing fillets he wishes. Thinking he is referring to the engine compartment cowl, they turn out a startling new idea in engine cowl. Project Engineer has drawing made to suit and sends drawing in to Chief Engineer pointing out that his new design will probably add 4 m.p.h.

"Landing gear was laid out for large diameter wheels. Somebody invents small diameter wheels and sells them to the Purchasing Agent. When they are applied to the ship it is found that the propeller ground clearance is too small. Project Engineer announces that a three-blade propeller will be used because of high propeller tip speeds or something.

"During set-up operations, upper wing is found to interfere with a beam in the roof of the factory. After comparing costs of altering the beam in the roof, or changing one set of wing struts, gap between the wings is decreased by 6 in.

"First weighing of the ship shows the center of gravity to be badly out of position. Upper wing is taken off and changed to one of large sweep-back, to balance the ship. Chief Engineer sends note to President explaining delay as necessary, as sweep-back has to be used to improve pilot's vision.



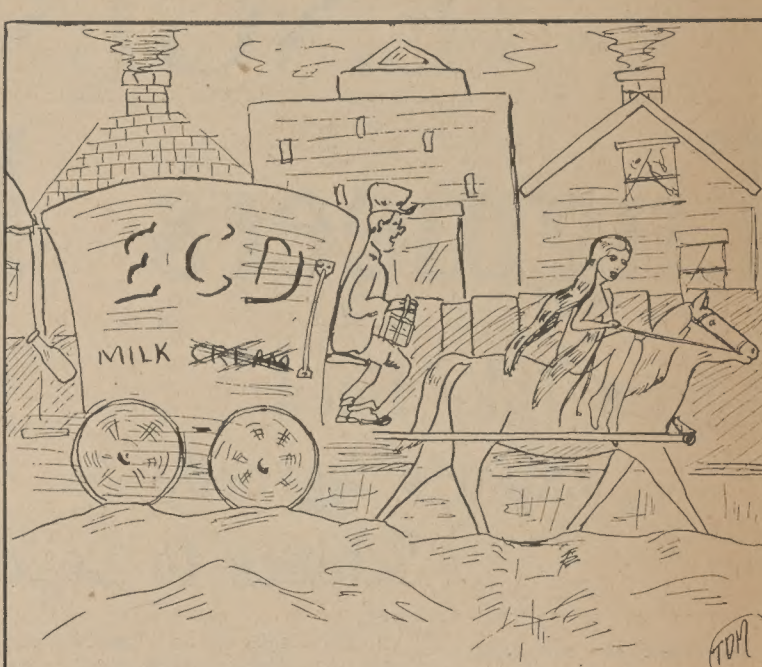
NEW RATION AT BAR CUTS QUOTA TO PAR

New beer rations and shorter parlour hours have hampered Sciencemen in their achieving the daily forty beer quota



ENGINEERS FLIRT WITH SCIENCE SKIRT

With wartime need for technical personnel, women students have been allowed to enter Applied Science Faculty



NUDE YOUNG THING NOW WORKS FOR KING

Due to the restrictions on tires and gasoline, Godiva and her horse now ride for victory

Personages Define Engineers' Status

Dr. Clarke, Dept. of Mining Engineering

The present body of engineering students is facing the problem of the successful accomplishment of its university studies more seriously than former bodies. The reason for this increased seriousness need not be explained. Many students are having trouble in varying degree. Possibly a discussion of the problem by an instructor who still has faint memories of his student days would be helpful.

Applied Science students are present on the campus in unprecedented numbers because the Ottawa authorities want them there to the end of increasing the supply of men with engineering training for war industries and for the armed services. Men with engineering training—what does that mean? So far as training that can be got at a university is concerned, and without differentiating between types of engineering training, the writer will risk the answer that it means: men with a certain minimum background of knowledge, extending over quite a wide front of subjects, so well mastered that it is available for application to problems at any moment; with a much more extensive background of knowledge sufficiently well mastered to be available for application at short notice; with a certain minimum of skills, technical mainly but not entirely, ready for use at all times; and with a set of habits of thinking and working which are suited to the handling of practical engineering problems.

A student cannot get his engineering training directly. He can acquire it only as a by-product of the expenditure of sufficient effort on the study of a wide array of subjects. It would be very simple and fine if it were possible to set up a university course in "Engineering Training" and, thereby, drive straight for the thing that is wanted, side-stepping all the courses in and that, the bearing of which on what an engineer does in practice is not any too clear. But this just cannot be done. As has been said, an engineer's training—that intangible commodity for the use of which his employer pays him his living—is a by-product of all the effort and work which the engineer has expended on specific tasks in school and out of it.

The Faculty of Applied Science has the task of seeing to it that its students get an adequate university engineering training. It accomplishes this task by setting up an array of courses which, according to its judgment and to past experience in engineering teaching, students should study to get this desired by-product called engineering training, and by imposing conditions on the students which will induce them to expend at least the necessary minimum of effort on these courses to get a useful quantity of the by-product. These conditions are imposed by the system of examinations whereby the Faculty's instructors trade marks in the various courses in exchange for the students' work.

The problem of the engineering student while attending university simplifies down to the fairly straightforward one of bartering work for marks. It is not quite straightforward though, for work is not a clear-cut, definite thing. There are many kinds of work and the student must determine what kind of work a given instructor in a given course demands in exchange for marks. It may be the sort of work required to

Duncan Bath, 2nd Year Electrical

As an Engineering student I do not feel able to say whether or not we are essential to the war effort. That responsibility must be left to those in charge of said war effort, who know the needs of modern war and who also know of what actual value we are in meeting those needs.

I really believe that responsible men want us to continue our University studies—but I should like to say something of the recognition we are given for such work! Various sources would have us believe that our main reason for being here is to dodge armed combat. Other sources would have us believe that we are absolutely indispensable to the war effort. In my opinion, either tendency is harmful.

The idea, I believe, is for us to be recognized as "needed" rather than "indispensable." This attitude would undoubtedly lead to a greater spirit of co-operation for all concerned—and there is nothing more powerful than a really united effort, unhindered by irritating and wasteful side issues!

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commit to memory factual matter; the effort required in practicing mental or manual operations; or a combination of types of work; or even some form of work that is related to the eccentricities and pet notions of the instructor as well as to the subject matter under study. Any form of barter calls for shrewdness and in the university brand of barter for marks, the student is in the vulnerable position. He has to be shrewd enough to sense what sort of work his instructor requires and industrious enough to proffer it in sufficient quantity. He must also be strong-minded enough to set aside his likes and dislikes for courses and instructors and to distribute his work adequately over all his courses. If the quality of work is not so high because of intellectual or other limitations, the quantity must be proportionately greater.

Students may rest assured that the system to which they are required to comply is not designed for very brilliant men. It is designed for men of average ability and imposes not more than a reasonably difficult or onerous load on them. The system is not designed on the basis of the average inclination to work, however. The student who will not work, fails.

Students are puzzled over being required to attempt to learn material that, so far as they can see or ascertain from questioning practicing engineers, they will never have occasion to use. The explanation is that no one can master everything he attempts. But in attempting things that tax one's capabilities, one gains complete mastery over a certain residuum of knowledge or skill involved in the harder exercises and this residuum of knowledge grows as one becomes able to attempt harder and harder things. This is, again, the idea that engineering training is a by-product of the effort expended in striving to accomplish appropriate tasks.

Lt.-Col. P. S. Warren

Officer Commanding U. of A. C.O.T.C.

At no time in our history has the engineer been more in demand than at the present time. A war of machines is being waged, and engineers are required to make the machines, to fight them and to repair them. These machines fight on land, on sea and in the air. There is a continual increase in both size and complexity of these engines of war. A modern battleship is the pride of the engineering profession. Engineers build the ship and engineers fight her.

In a war of machines, the mechanical engineer is much in demand; in fact, the demand has far exceeded the supply. Various services must often be content with the second best, and sometimes it is not good enough. With the continued increase of the Canadian Navy, Army and Air Force, the lack of trained mechanical engineers will become more acute.

Communication between fighting units is by radio as well as by the older methods, and a certain number of electrical engineers are required to supervise the signals equipment. Though good practical men are always in demand in Signals, a goodly number of fully trained men are a necessity for the armed forces every year.

The Army still requires the civil engineer, and is very dependent on him for so many purposes. The devastation of modern bombing on docks, airdromes and other stations of the fighting forces will undoubtedly be more severe in the future, and the army engineer will find his duties broadening as the war progresses.

Mining engineers fit into many places in the services. Many take commissions with the Army Engineers and some go to Ordnance. It was mining engineers who did much of the tunnelling recently at Gibraltar.

Chemical warfare has not been initiated in the present struggle, but there is always the possibility that the enemy will make use of gas as a last resort. The surest way of preventing him from doing so is to demonstrate to him that we are ready to reciprocate. There will probably be a limited number of opening for chemical engineers in experimental work on war gases.

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W. W. Preston

Dept. of Civil Engineering

"Puzzled? Are you working on a task that seems difficult? Then tell the engineer about it. He'll be able to help you"—such is the comment of a workman when difficulties arise. The engineer is expected to know something about almost everything, and everything about some things. He does not always know the answers. But he does tackle strange problems, both technical and non-technical. Frequently he finds his technical training has taught him to ask questions that lead him in tracking down an elusive answer. No matter where you find the engineer, his life is one of ever-changing experiences—new problems in design, or in organization, or in dealing with human beings.

Our engineering students know the experience of facing new and unexpected problems. They meet them early in their course, and develop shock resistance—or retreat. The survivors push forward. The stragglers stop to hiss at their assignments, until they learn that problems are immune to hissing. The student who succeeds realizes the necessity for productive effort. Before long he enjoys the challenge of unknowns and goes off the beaten track like a big game hunter into other fields besides engineering.

In publishing this issue of The Gateway, the Engineers face the perplexities of newspaper preparation. Usually their responsibility is limited to the odd column in regular issues of The Gateway. Today they are showing how well they can apply their ability to master the difficulties of writing editorials, news copy, features and filler.

Next week the Engineers will step into the social world with their annual Ball. A staggering display resulting from planning, financing, and ingenuity awaits us. Later they will enter the political arena with more election propaganda than any civic or federal fight. And no one knows what unexpected drive they may sponsor to raise war funds or arouse enthusiasm for such an Utopian structure as a Students' Union Building.

Such is the life of the engineering student on the University campus—versatile and enthusiastic in solving a variety of problems. This experience is most valuable when he graduates into the changing industrial world.

There was a day, not long past, when industry could not offer employment, and an engineer had to create his own job. The depths to which he fell is well illustrated by a story:

One engineer, who had tried in vain to find any kind of work, visited a zoo and noticed that a lion's cage was empty. He applied to the zoo-keeper for the job of walking up and down the cage in a lion's skin. After much persuasion, the zoo-keeper agreed. All went well until the engineer noticed a bear coming towards him. He yelled, but was soon calmed, when a voice from the bear skin said, "Pipe down! You aren't the only engineer in town!"

When industry revived, many engineers worked in other than their own field of engineering. The electrical graduate became a surveyor, the civil a metallurgist, and the mechanical a miner. It didn't matter in which course he had graduated. He sold his "ability to learn," and then by observation and study fitted himself for his strange job. Even today an engineer is not always justified in classing himself as a specific kind of engineer. Chemical engineers must solve mechanical problems, electricals do structural work, and civils make chemical analysis. No field of engineering is isolated from the others. Any engineer grapples with the problems in another engineer's field.

Most students do not know for whom they will be working when they graduate. Nor do they know the general kind of work they will be doing nor where they will be employed. These uncertainties lead to only one conclusion. It is wise to take a general interest in all kinds of activity, both technical and cultural. The merits of a general course of instruction are more favorable than specialization.

There may be times when a lecture or a laboratory assignment seems useless. A safer observation would be that the work may have limited application. If graduates would only write back occasionally to this paper, telling of instances where they have used information which they thought was unimportant as a student, we might be surprised at the importance of certain work. On the other hand, the recent graduate might express the opinion that practice has changed so rapidly in industry that parts of the work, which he took in class a year or so previously are out-dated. He should offer constructive suggestions.

War has made drastic changes in industry. In pre-war days, steel construction was very popular. Then steel was rationed, and emphasis shifted to concrete structures which were reinforced with steel bars. Now engineers are working on the problem of eliminating all steel from certain concrete structures. Timber design has also developed. Wood is no longer a material for cheap buildings alone. It is gaining prominence in the construction of important structures. In fact, its progress has been so rapid that America, the bountiful timber-land, faces the incredible position of having to ration wood. Similarly, in other branches of engineering many unexpected situations arise and call for all the energy, ingenuity and imagination engineers can summon to find a solution.

The engineering student wants to know about these current technical advances. In part, this desire can be satisfied by the University lecturer shifting the emphasis in his course material. It is equally important that each student make an effort to read the current technical literature. The University Library receives most engineering periodicals. Unfortunately, there is not a technical reading room in the library. The Engineers have not fared as well as the Medical students, who have their own library and a reading room. However, the Engineers can borrow technical literature from the Library. They would do well to employ the secret of one's success in industry—individual effort.

After the war the engineer must be prepared to face still more perplexities. In the meantime, his best policy should be to master his chosen field and keep in formed of advances in related fields of engineering, as well as making his contribution to society.

Very truly yours,
The Landlord."

Lie down beside her, soldier,
And do but use her well,
And she can ease your passion
With cries and powder smell.
Be reckless in your loving;
Her grace makes no one poor,
For only bullets issue
From such an iron whore.
—The Canadian Forum.

He saw her dashing from a car
And up to her he sped.
"May I help you to alight?"
"I do not smoke," she said.

He saw her dashing from a car
And up to her he sped.
"May I help you to alight?"
"I do not smoke," she said.

After the Ball



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-:- ENGINEERS' SPORT SECTION -:-

Engineers Headed For Bulletin Trophy

Aggies Take Heed,
Experts Agreed,
Science to Lead

Near one of the large army camps lived a dear old lady whose chief pleasure was making the boys happy by keeping them supplied with sox, magazines, cigarettes, etc.

She felt that this was not enough, however, and so she asked the colonel to have some of his men come over for tea. The colonel obliged by sending over a platoon of his best troops.

So they sat around on little chairs with teacups balanced on their knees and ate cakes and cookies, and prattled on about whatever old ladies talk about. This went on for a few hours, and the men were getting quite fed up and disgusted. At last the dear woman got up and said, "Now, boys, I have just one little bun left—what will I do with it?"

The sergeant quickly stood up and shouted, "The man who answers that question will be court-martialled."

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Sciencemen Victorious in Second Game

PLUMBERS PLAN PUCK PUSHOVER

Frosh Hoopsters
Main Element
Engineer Team

With the basketball season in its second half, the Engineers team, through no fault of their own, find themselves at the bottom of the interfaculty league. As usual, Varsity's best players in this field of sport are Engineers, and are keeping the Bears on top of the City League. The interfaculty team has, therefore, been deprived of its best players of former years.

The squad this year consists almost entirely of Freshmen, who are just becoming accustomed to the brutality of the Gut Plumbers and the lack of etiquette of the Manure Spreaders, whose teams consist of seasoned stumblebums. Bewildered by their opponents' uncouth tactics in the first half, these Engineers, who are at heart gentlemen, are now learning to cope with these ruffians. Now that the newcomers have been initiated, they are becoming a formidable team.

In the first game of this term the Engineers were edged out 30-23. Although leading throughout most of the game, they were overwhelmed by superior numbers in the closing minutes. Their game was vastly improved over previous exhibitions, and the next game will find them unbeatable.

The next scheduled game was not played because of cold weather. As our Freshmen have not yet imbibed a sufficient percentage of alcohol in their blood to class it as a proper anti-freeze, this not only protects them, but shows a gentlemanly consideration for our opponents.

At the next game the Engineers' team will undoubtedly inflict a crushing defeat upon the unfortunate team which is scheduled for this slaughter. Engineers wishing to witness this edifying spectacle can observe it at the drill hall Thursday night. Any Engineers who wishes to play basketball should come out Thursday night and uphold the honor of the E.S.S.

PRESIDENT CLARIFIES

(Continued from Page 1)

mission from the Bureau, which permission is given only on the recommendation of the Dean of the Faculty concerned and the Commanding Officer of the University Training Corps. We must try to enlighten the public concerning this situation, and thus secure their sympathy.

"With regard to the minority, who are achieving the high standing now required for continuing studies in Arts, Commerce and Law, one can understand the diffidence of the Dominion Government in saying categorically whether they should or should not enlist. As long as we have a voluntary system of recruitment (for the Active Army as distinct from the Reserve Army), no one likes to interpose barriers in the way of anyone enlisting who feels the urge to do so, unless he is definitely required for a particular kind of war service which necessitates further university training. Moreover, no one cares to take the responsibility of acting as someone else's conscience. All that can be said is that those in authority feel that it is in the best interests of the country for at least some promising students to continue non-technical studies in each university.

Science Students' Regulations

"The University Science Students' Regulations, 1942 (P.C. 9566), which became effective December 1, have been superseded by the 'National Selective Service Civilian Regulations, 1943' (P.C. 246, January 18), but the regulations governing students remain substantially unaltered. Within the last few days the University has been requested to prepare nominal rolls of all students expected to graduate as technical personnel this year and, separately, of all other students in training for this classification. A supply of printed forms is expected to arrive this week, to be completed at once by all male science students, in which the student declares whether he does or does not wish to volunteer for service in the Armed Forces of Canada as a technical officer and, if he does wish to volunteer, he indicates the Services in order of his preference and the technical corps or branch within each service. Information concerning these branches will be available to the student when he is completing the form.

"Students who declare their intention to volunteer will be placing their services unreservedly at the disposal of the nation. This should silence criticism concerning such students, since, if they remain at the University to complete their studies, it is because the country wishes

STRONG LINEUP

This spell of cold weather has put a definite crimp in the hockey schedules. However, as soon as there is a favorable break in the frigid atmosphere, the league will start rolling again. A good brand of hockey should be dished up.

The Engineers' hockey team is not leading the league, yet. The reason is simple—we haven't played enough games as yet. In their only game so far, we were held to a 2-2 tie by the Ag-Com-Law (you know that new combined faculty for stray hockey players). The Aggies tried to camouflage themselves by allying with Commerce and Law. But corn stands out in any company. The farmer influence was there all right.

It was a moral defeat for us to get only a tie, but the boys will try to do better next time. After all, the forty beer men have to acclimatize themselves to the presence of Aggies.

Red Deer's contribution to this institution, Jack Setters, is back in goal. The Engineers will have no worry in this department. On defence, we have Lambert, a veteran campaigner, Ronnie Helmer, who himself comes from a hockey family, and big Vern McKeague. The last two are new recruits. Up in front the Dutka-Dimock-Simpson forward line is as good as any in the league. Bill Dimock, who starred for Trail Juniors, and was one of the high scorers in the Junior Kootenay League last year, has shown great promise already. He centres Rudy Dutka and Coach Jack Simpson, both hustling players of proven capabilities. They have been among the mainstays of the Engineers for several years now. Then we have an all-Freshman line of wings—Perott and McCune and centre Grant Dunsmore. Much is expected of this combination, although it is still too early to draw any definite conclusions. As utility men, we have MacLean and Ross.

The forty beer men are aggressive in hockey as in everything else, and play a crowd pleasing brand of hockey. This can be properly attributed to the alcoholic stimulants which are freely imbibed before and during every game. Even though some quarters favor the Arts team, the well informed parties know that we are a sure bet to win. We have a new vitamin, found only in a special brew, known only to the Engineers, with which we will build ourselves up to wrest the Bulletin Trophy from the Hayloft.

Forty beers and on to the championship!

SNAPS WANTED!

The Year Book still needs some candid camera shots for its forthcoming, better-than-ever-before, superlative edition. Don't be shy—bundle your prints up and leave them in the Year Book box in the Arts basement by the post office. Any pictures which show Varsity life on or off the campus will be welcome.

Two free books will be given away this year to those two lucky people who hand in the best shots. This means you can have your cake and eat it, too—get a Year Book and a refund by winning our contest. But do it now—don't let it go any longer. Hand in all the prints you can beg, borrow or steal today.

This year's book promises to be better than ever before, in spite of wartime restrictions. The theme chosen (secret, of course) is something new, novel and topical. Printing has started on the first part of the book, and is progressing favorably.

But remember, the new, improved Year Book (better-than-ever-before) needs campus pictures—hand them in now!

them to do so.

"The completed forms will be returned to the Wartime Bureau whose duty it becomes to place the students and graduates to best advantage. Those students who have volunteered will presumably be sent to Service training camps or attached to appropriate units for the summer. Those who do not volunteer will likely be placed in appropriate industries for the same period. Graduates will of course receive more permanent assignments.

"Mr. H. W. Lea, Director of the Bureau, and Colonel G. W. Beecroft, its Military Adviser, are expected to visit the University of Alberta on February 1 and 2. A meeting will be arranged with the University Service Training Board, heads of scientific departments, and heads of students' technical or scientific societies, to discuss with the visitors the detailed working out of these regulations. Some of the more urgent questions concern summer employment of students, for which arrangements should be initiated very soon."

City League
In Full Swing,
Tues. and Thurs.

Sam Shekter, president of men's senior basketball, with Paul Kirk as coach, foresaw a real year for basketball. It is too bad that intercollegiate competition was impossible this year, as the boys have a really top-notch basketball squad. The team has lost the valuable services of playing manager Mike Provenzano and ace forward Bernie Critchfield. Sam Shekter has taken over the management and Bob Dumont is going to start playing again.

The team is playing in the Edmonton City Basketball League, which includes three U.S. and five local teams.

After getting off to a bad start in a tangle with the 331st American Engineers, the Varsity team started to roll, and in spite of examination nightmares, they took the second game from the Air Transport Civilians.

There was a league standstill for the Christmas holidays. After two weeks' hilarity and dissipation, the boys came back and breezed through two games, winning them both. Winning the next game by default, the Varsity squad were sitting at the top of the league with the Latter Day Saints.

Due to unforeseen player losses, the boys faced the Saints with only six men. Varsity fought hard for three quarters and held the score even. The lightning attack by the L.D.S. in the fourth quarter was too much for a tired Varsity team, and they went down fighting.

Jack Switzer and Sammy Shekter are the spearheads on offence, while Albert "Moose" Manifold is a tower of strength on defence.

LE CRITIQUE
DE MUSIQUE
ENGINEER CRITIC

To meet the accusations from the lesser faculties on the campus that Engineers are without culture, your critic wishes to point out to all, the goodly percentage of slip-stick men who attend the Sunday night concerts of the Musical Club. The secretary of the club is an Applied Science man, Ralph Hargrave. Our E.S.S. president, B. J. Anderson, is a regular attendant. Whether he comes of his own free will or because he is heckened into attending is beside the point. The fact remains he is there, confirming the actions of the culture-seeking Engineers.

The following are an Engineer's impression of the Musical of last Sunday night, January 24th:

The two ladies of the evening, Miss Jean Eagleson and Miss Bernice McBeth appealed to both the eyes and ears of the engineering audience. Miss Eagleson is a very soulful pianist, with a stage personality warm, poised and sincere—unblemished by the affectations too common among some concert pianists. Her "Minuet from L'Arlesienne Suite No. 1," Bizet-Rachmaninoff, was spirited, delightful. Her other two were deep and moving.

Miss McBeth could have held her audience breathless had she not opened her mouth any wider than to smile. Fortunately she did, however, and thrilled everyone with a voice of excellent strength and quality. We are happily anticipating her performance in "The Gondoliers." Miss McBeth was ably supported by her accompanist, Miss Joyce Lees, in a Lana Turner sweatshirt—a red one, too!

Prof. Nichols, always a friend of the Engineers whether in a classroom at the console, was in his usual good form, and contributed three numbers. The familiar "Reverie," by Richard Strauss, was a happy choice and beautifully presented. We always enjoy Mr. Nichols' informal notes, such as he gave us for Herman Howell's "Rhapsody No. 2." Mr. Nichols has always given enthusiastic and active support to the University Musical Club, but as Victor Graham said, we rather take him for granted. This may be true, but we are no less appreciative. We are reminded at this point of Mr. Nichols' recital for the Navy just before Christmas, when he played so generously and spoke so informally, such as to give the evening a sort of "by the fire-side" flavor. On this same program appeared another Engineer, Rich Swann, whom we cannot forget to include in our list.

To go on with the program—the entire second half of the evening was turned over to Mr. Egon Grap-

Beermen Step Out in
Hectic Third Period

SIMPSON, HELMER TALLY

In their second game of the season on Tuesday night, the Engineers, after spotting the A-C-L's a third period goal, came roaring back in a great drive which resulted in two counters, one with seconds to go. Although they had held an advantage in play, up to then the forty beer men were stopped by tough luck and lack of finish around the nets.

In the first period, as the Engineers began to pour it on, they were unfortunate in not getting at least one goal. Both Lambert and Simpson missed wide open nets. At the other end, Jack Setters turned aside neatly the few shots aimed at him.

The second period produced neither goals nor penalties. The Engineers missed several great chances.

Then in the third period the forty beer men had one defensive lapse, and Schrader scored from Younger for the A-C-L's. From here on the Engineers put on a continual power play, swarming all over the opposition net. Schrader was hustled off to the cooler for cutting down one of our men. During the resultant pressure applied by the forty beer men, Coach Jack Simpson finally scored by B. Dimock on a pretty passing play.

With the scored tied and with only 35 seconds to go, Ronnie Helmer, Engineer defenceman, made a solo rush down the ice, and from a sharp angle fired in a goal.

The final score was 2-1, with the Engineers claiming a well deserved victory.

Lineups:
Engineers—Setters, Perrott, Lambert, Dutka, B. Dimock, Simpson, McCune, Dunsmore, McLean, Ross, McKeague.

A-C-L—Torrance, Schrader, Andrews, Younger, Taylor, Dalsin, Lebel, Rigney.

Three stars — Taylor, Younger, Lambert.

entin. Hereby follows a technical description of the performance from an Electrical's point of view:

The performer extended an antenna in such a position as to pick up all stray signals (applause). Then in contrast to all good engineering practice he started out at full volume, which overheated all elements from the start. All piece were finished with the same flourish of the antenna, which left it in the same extended position.

The good Mr. G. seemed to have omitted some by-pass condensers from the first detector stage. The result was a high pitched squeal (about 20,000 c.p.s.—unfortunately still in audible range) Improper filtering resulted in transients at the beginning of each note. Various other imperfections in writing resulted in severe "motor-boating." His audio transformer was rather poorly matched to the final 2A3. This, combined with a cracked speaker, resulted in a high distortion—80% (plus 95% contortion). His frequency response showed a sharp peak at about 10,000 c.p.c., which gave his high notes a piercing clarity. By overloading 6L6's in the final stage, he managed 100 watts output with a slight overheating. His detector was tuned to respond strongly to the frequencies from 4,000 to 6,000 c.p.s. (applause), since he responded to a 0.0035 microwatt signal with another discharge—"Intermezzo, from the picture of the same name"—unquote. Then he shut down.

Mrs. Hatlen was, as always, a very sympathetic accompanist, and the audience was as sympathetic toward her.

NO JOKE!

Rumors have it that skating will begin Sunday at 2 p.m. at the Varsity Rink.

AGGIES!

Snow shovellers needed for rink. Here is your chance to use your manure shovel to advantage. Ample remuneration. Apply Union Office any day after milking time.

Dodge Expedition
Shown to Miners

Second meeting for 1943 was held in Arts 342 at 4 p.m. on Monday. After fortifying themselves with the usual quantities of groceries, the rock maggots and muckers gathered amid clouds of tobacco smoke and relaxation for an hour of entertainment and education. A half-hour movie travelogue, "Wheels Across India," followed reading of the minutes by Sec. Hugh Naldrett. The film showed the progress of the Dodge expedition, amid strange scenes and stranger customs of innermost India. Following the movie, Don Wetterberg, spark plug of the 4th year miners, took the floor to inform the boys on a few things they needed to know concerning Britannia Mine. A low grade, low cost copper mine, some 30 miles north of Vancouver, the property is mined by a system of caving and "glory holes." No hoisting is necessary, since the ore is removed by an adit driven horizontally into the mountain, the workings being above this main entrance. Following his talk, "Doctor" Wetterberg concluded by showing a number of photos of the property, including one of the camp cook, which left the boys wide-eyed and wondering.

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